

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

I. APPLICANT:

Company:
Lafayette Utilities System
P.O. Box 4017-C
Lafayette, LA 70502

Facility:
Doc Bonin Electric Generating Station
1120 Walker road in Lafayette, Louisiana
Approximate UTM coordinates are 591.795 kilometers East and 3345.279
kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Lafayette Utilities System's Doc Bonin Electric Generating Station is an existing electric generation facility. Doc Bonin Electric Generating Station currently operates under Permit No. 692, issued February 15, 1977.

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Lafayette Utilities System on October 15, 1996, requesting a Part 70 operating permit. Additional information dated January 25, 2002 and June 7, 2005, was also received.

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

Project description

The Doc Bonin Power Plant is an electric generation facility consisting of Boilers No. 1, 2, and 3, each having a separate stack. The boilers have the capability to burn natural gas or No. 2 fuel oil. The boilers have maximum heat inputs of 596.7, 953, and 1946 MMBtu/hr, respectively.

There are four fuel oil tanks on site. Tanks 1 and 2 contain No. 2 oil and have storage capacities of 440,000 and 1,443,000 gallons. Tanks 3 and 4 each have a storage capacity of 2,538,000 gallons. Tanks 3 and 4 also have the capability to store No. 2 or No. 6 oil. Tanks 3 and 4 are currently set up to store No. 6 fuel oil; however, they are nonoperational.

Permitted Air Emissions

The estimated permitted emissions in tons per year are as follows:

Pollutant	Emissions
PM ₁₀	228.19tpy
SO ₂	2060.79 tpy
NO _x	3086.94 tpy
CO	1035.29 tpy
VOC	87.75tpy

Regulatory Analysis

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, and New Source Performance Standards (NSPS). Prevention of Significant Deterioration (PSD) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

Louisiana Air Quality Regulations and NSPS

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit.

Prevention of Significant Deterioration Applicability

PSD does not apply. No physical modifications are proposed with this permit.

General Condition XVII Activities

No General Condition XVII Activities were identified.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

IV. PERMIT SHIELDS

A permit shield was not requested.

V. PERIODIC MONITORING

The owner or operator shall measure opacity, and all SO₂, NO_x, and CO₂ emissions for each affected unit.

For the SO₂ emissions the owner or operator of an affected unit shall measure and record SO₂ emissions by providing other information satisfactory to the Administrator using the applicable procedures specified in 40 CFR 75 Appendix D to this part for estimating hourly SO₂ emissions.

For NO_x emissions the owner or operator shall install, certify, operate, and maintain, in accordance with all requirements of this part, a NO_x continuous emission monitoring system (consisting of a NO_x pollutant concentration monitor and an O₂ or CO₂ diluent gas monitor) with the automated data acquisition and handling system for measuring and recording NO_x concentration (in ppm), O₂ or CO₂ and NO_x emission rate (in lb/MMBtu) discharged to the atmosphere. The owner or operator shall account for total NO_x emissions, both NO and NO₂, either by monitoring for NO only and adjusting the emissions data to account for NO₂.

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

For CO₂ emissions the owner or operator shall install, certify, operate, and maintain, in accordance with all requirements of this part, a CO₂ Continuous emissions monitoring system.

For opacity the owner or operator shall ensure that all continuous emission and opacity monitoring systems are in operation and monitoring unit emissions or opacity at all times that the affected unit combusts any fuel except as provided in 40 CFR 75.11(e) and during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and appendix B of 40 CFR 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR 75.20. The owner or operator shall also ensure, subject to the aforementioned exceptions, that all continuous opacity monitoring systems are in operation and monitoring regulation, or permit. The owner or operator shall also ensure, subject to the aforementioned exceptions, that all continuous opacity monitoring systems are in operation and monitoring regulation, or permit. The owner or operator shall ensure that the requirements of 40 CFR 75.10(d)(1), (2), and (3), as applicable are met.

Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS		
ID No:	Requirement	Notes
C1 Boiler No. 1	40 CFR 76- NO _x Reduction Program	Does Not Apply- Part 76 applies only to coal-fired units.
	NSPS Subpart D- Standards of Performance for Fossil Fuel Fired Steam Generators	Does Not Apply- Unit has not been reconstructed or modified since August 17, 1971.
	NSPS Subpart Da- Standards of Performance for Steam Generating Units	Does Not Apply- Unit has not been modified or reconstructed since September 18, 1978.
C2 Boiler No. 2	40 CFR 76- NO _x Reduction Program	Does Not Apply- Part 76 applies only to coal-fired units.
	NSPS Subpart D- Standards of Performance for Fossil Fuel Fired Steam Generators	Does Not Apply- Unit has not been reconstructed or modified since August 17, 1971.
	NSPS Subpart Da- Standards of Performance for Steam Generating Units	Does Not Apply- Unit has not been modified or reconstructed since September 18, 1978.
C3 Boiler No. 3	40 CFR 76- NO _x Reduction Program	Does Not Apply- Part 76 applies only to coal-fired units.
	NSPS Subpart Da- Standards of Performance for Steam Generating Units	Does Not Apply- Unit has not been modified or reconstructed since September 18, 1978.

Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS		
ID No:	Requirement	Notes
T1 Fuel Oil Tank No. 1	Control of Emission of Organic Compounds- Storage of VOC's (LAC 33:III.2103)	Exempt- Vapor pressure Below the 1.5 psia trigger.
	NSPS Subpart K- Standards of Performance for Storage Vessels 40 CFR 60.110	Does Not Apply- Constructed prior to June 11, 1973.
T2 Fuel Oil Tank No. 2	Control of Emissions of Organic Compounds- Storage of VOC's (LAC 33:III.2103)	Exempt- Vapor pressure below the 1.5 psia trigger.
	NSPS Subpart K- Standards of Performance for Storage Vessels 40 CFR 60.110	Does Not Apply- Liquid stored is not a petroleum liquid per 60.110(b).
T3 Fuel Oil Tank No. 3	Control of Emissions of Organic Compounds- Storage of VOC's (LAC 33:III.2103)	Exempt- Vapor pressure below the 1.5 psia trigger.
	NSPS Subpart K- Standards of Performance for Storage Vessels 40 CFR 60.110	Does Not Apply- Liquid stored is not a petroleum liquid per 60.110(b).
T4 Fuel Oil Tank No. 4	Control of Emissions of Organic Compounds- Storage of VOC's (LAC 33:III.2103)	Exempt- Vapor pressure below the 1.5 psia trigger.
	NSPS Subpart K- Standards of Performance for Storage Vessels 40 CFR 60.110	Does Not Apply- Liquid stored is not a petroleum liquid per 60.110(b).
T6 Gas Station Gasoline Tank	NSPS Subpart Kb-Standards of Performance for Volatile Liquid Storage Vessels 40 CFR 60.110	Does Not Apply- The tank has a capacity less than 75 cubic meters.

Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS		
ID No:	Requirement	Notes
T7 Condensate Tank	NSPS Subpart Kb-Standards of Performance for Volatile Liquid Storage Vessels 40 CFR 60.110	Does Not Apply- The tank has a capacity less than 75 cubic meters.

VII. STREAMLINED REQUIREMENTS		
Unit or Plant Site	Programs Being Streamlined	Stream Applicability
Doc Bonin Electrical Generating Station		
		Overall Most Stringent Program

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants – Toxic air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

**Doc Bonin Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 31135
Activity Number: PER19960003 and PER20040002
Draft Permit 1520-00002-V0 and 1520-00002-IV1**

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulphur.

TAP - Toxic Air Pollutant (LDEQ acronym for air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.